

•• THE ••

Inventor's Reference

This book is invaluable to inventors and persons interested in
patents, caveats, designs, trade-marks, copyrights, etc.

Therefor should it fall into the hands of one who
is not particularly interested in such things,
he would confer an appreciable favor
on any inventor into whose pos-
session he places it. A
favor would also be
extended to the
publishers:

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PUBLISHED BY
GLASCOCK & CO.,
PATENT ATTORNEYS,

REGISTRATION No. 1245.

626 F St. N. W.

Washington, D. C.

(On application a copy of this book will be sent to any address.)

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INTRODUCTION.

Office of Glascock & Co.,

Patent Attorneys,

626 F Street N. W., Washington, D. C.

Dear Sir: We take pleasure in herewith handing you a copy of our latest circular, relative to patents, caveats, designs, trademarks, copyrights, etc. We trust that it will be of use to you.

We desire to call your attention to our moderate charges for prosecuting applications for patents, etc., and we assure you that any business that you place in our hands will receive careful and prompt attention.

Should you have an invention that you wish to patent, send us a drawing or model of the same, together with a full description, and we will make a careful examination of the records in the Patent Office and report to you, free of charge, as to the patentability of the device.

Also wishing to call your attention to our references and testimonials, and assuring you, should you favor us with your work, that we will exert every energy to render our services satisfactory to you, and should your invention possess merit we will leave no stone unturned in our efforts to secure for you the protection afforded by our laws and institutions.

Thus we will endeavor to gain your lasting good will, and as the bulk of our business comes to us through the recommendation of those for whom we have done work, we will strive to manage your business with such care, promptness, competency and honesty that you will feel fully justified in recommending us to your friends.

Trusting that we may serve you and number you among our many references, we are Yours truly,

GLASCOCK & CO.

PROGRESS.

The remarkable inventive genius developed in the United States within barely a generation may be ascribed to the robust originality of the American people, coupled with the stimulus of great financial reward, guaranteed by favorable legislation. The American patent system, which had its birth one hundred years ago, has witnessed a wizard-like transformation in mechanical appliances in the utilization of nature's forces, and in all the conveniences and accessories of life.

If we consider the stride from the primitive plow, with which the ancient tickled the soil, to the marvelous farm implements of to-day; from the burnt brick libraries of Babylon and Nineveh to the superb treasures in moveable types and sumptuous buildings that stand, piled tier on tier, in the British Museum and the Library of Congress, we may truly realize how the world has progressed.

Yet the most wonderful part of this advancement has been made within the period thus mentioned. During that time we have had the discovery of telegraph, the electric light, and all the various uses of electricity. Within the same period we have seen the revolution of the printing press from the clumsy hand-lever contrivance of Franklin's time, to the marvelous Hoe machine which prints and folds seventy-five thousand copies of a complete eight-page newspaper in an hour. In that time the locomotive engine, the steamboat and the luxurious sleeping car have supplanted the primitive modes of travel which preceded them, and we have advanced from the old hand-spinning wheel to the wonderful weaving looms and knitting machines of the present day.

Besides all these we have had the discovery of the telephone, which conveys the human voice, in conversation, hundreds of miles; the phonograph, which records the sound of voice and repeats its tones at the will of the operator; the sewing machine and the typewriter, which revolutionized methods in important branches of business, and even the convenient little lucifer match which replaced flint and friction. Let any man try to imagine the comparative condition of life and society if these patented discoveries had never been made, and he will measurably appreciate the benefits of the system that inspired them.

The question now arises: Is there room for further improvement? Has the highest degree of perfection been attained in all lines of industry? The records of the Patent Office correctly answers these questions in the negative; for at present patents are being issued in this country at the rate of about twenty thousand a year. Then in view of this record we ask: What are we coming to? At this rate the advancement of the world in the next ten years will be something stupendous. The present generation beyond a doubt will live to see aerial navigation accomplished; waste products from all manufacturers advantageously utilized as by-product; a tremendous gain in speed of railway transportation; and marvelous developments of electricity.

We have made tremendous strides in the past but in the future we are destined to outstrip the dreams of the most visionary.

PROFITABLE PATENTS.

Of the half million patents issued in this country, many have been more or less profitable, not only returning money profits to the inventors, or their assigns, but also benefiting in a broader sense the world at large. Many hundreds of these patents have made millionaires of their owners, while many thousands more have produced fortunes large and small. It is estimated that three-fourths of all the capital invested in manufacturers in this country, a total of over six hundred and fifty millions of dollars, is directly or indirectly based on patents.

Of the well known inventions that have produced enormous returns, a few examples may be cited. The sewing machine patent not only made numerous individual fortunes, but created several large and wealthy corporations. The telegraph patents realized an immense fortune to the original inventor and to a number of others. The Goodyear rubber patents, the original of which was a simple mixture of rubber and sulphur, formed the basis of vast manufacturing industries and

immense wealth to hundreds of people. The McCormick harvesters and many other agricultural machines have reaped the earth's products and great wealth at the same time. The sleeping car patents have made millions for their owners, and the electric and telephone patents have enormously enriched the inventors and all who are associated with them.

These are only a few conspicuous instances, and while the list of millionaire patents, so to speak, might be increased to great length, it is not these which have realized the greatest total of wealth. It is the thousands and tens of thousands of lesser inventions which have each brought their discoverers a few hundreds, a few thousands, or a modest fortune, that amounts to the most in the aggregate and have really resulted in the greatest benefits. And it is not necessarily the wonderful invention that attains great success. Sometimes a simple little device, like the paper fastener or the common buckle which has special utility, will make several fortunes. It should also be understood that the great aggregate of patents granted is vastly swollen by the enormous number of improvements and attachments upon the large inventions, and these may be made by any one who can. For instance, the Crane and Otis elevators employ in their construction and operating mechanism over two hundred separate patents. The modern printing press manufacturers own hundreds of patents which cover the various parts that go to make the complete machine, while the great electric companies have procured or purchased scores upon scores of patents necessary to the perfection of their various systems. And so it is all through the list.

The field of invention is practically limitless, and great are the rewards that have been realized by the wonderful and useful discoveries already made. Still greater ones remain to be enjoyed by those who solve the numerous problems and hoped-for achievements remaining in the realm of the unattained.

WHAT "CRANKS" HAVE DONE.

It is not infrequently the case that a man who is of an inventive turn of mind is considered by his neighbors and the community at large as a "crank," and the man who is the originator of a meritorious invention, among other things, has to contend with the sentiment of his friends and acquaintances, who extend to him their sympathy and the same time regard him as a "crank." Especially is this disadvantageous to an inventor if he be sensitive or impetuous and solicitous of support for the proper and successful introduction of his invention; but by any chance let that so-called "crank" be successful with his invention, and then it is amusing to note the change that takes place in the regard for him. No more striking example can be pointed to than the case of Thomas A. Edison, the inventor who electrified the world and who is of world-wide renown. When Mr. Edison was launching on his field of invention he was comparatively a poor man, and he relied on the support of others for the successful introduction of the valuable products of his brain, and he was considered a "crank," and as such he was avoided by persons who would be only too glad to be associated with him now that he is in the zenith, or approaching that point, of his inventive career.

The world owes lots to so-called "cranks." They have given us the telegraph, telephone, railroad facilities, steamboats, and they have been connected in some manner or other with the production of every article or appliance that falls into the useful hand of the human family.

This is what "cranks" have done; the so-called "cranks" of to-day are busily at work producing contrivances and conveniences that will afford an exhaustless source of surprise in the future.

DEFINITION OF PATENT LAWS.

Patent Law consists primarily of the various acts of Congress relating to the granting of patents to inventors. These acts or laws prescribe certain formalities and conditions under which patents may be granted and also for enforcing the protection which the patent implies. The grant of a patent does not give the right to

the invention; it gives a right of protection in the exclusive use of the invention. The owner or originator of an invention has a perfect right to the use of the same without a patent. The grant of protection to an inventor in the exclusive use of his invention for a limited time is so well founded in justice and public policy that, although of recent origin, it has been adopted by all civilized nations.

The Constitution is the foundation of all patent laws. It declares that Congress shall have power "to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." Thus such legislation is vested exclusively in Congress, and by such legislation jurisdiction for the administration of the patent laws belongs to the Federal Courts.

FOR WHAT PATENT MAY BE GRANTED.

The law provides "that any person (this includes men, women and children, citizens and aliens) who has invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement thereof not known or used by others in this country, and not patented or described in any printed publication in this or any foreign country before his invention or discovery thereof, and not in public use or on sale for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the duty required by law and other due proceedings had, obtain a patent therefor."

Thus, there are four classes of patentable subject matter, viz: art, machine, manufacture and composition of matter.

The term "art" comprehends all methods and processes by means of which certain results are accomplished or things produced. For instance the methods or process for making hard rubber. The term "machine" includes all kinds of mechanism, whether machines proper or improvement thereon. The term "manufacture" includes all kinds of useful articles which are made, except machines and composition of matter, as for instance tools, implements, etc. "Composition of matter" includes all kinds of mixtures or compounds, such as medicines, foods, etc.

TO WHOM PATENTS ARE GRANTED.

Patents are granted to the original or first inventors. Although patents may be obtained by the executors and administrators of inventors. An inventor may assign his invention and may have a patent issued to the assignee. An invention by joint inventors must be patented to both jointly.

In the United States patents are granted for a term of 17 years.

An invention to be patentable must be a completion of something tangible. The mere conception of an idea is not patentable. A new combination of old and known elements which produces a new or beneficial result is patentable, but the combination of old elements which produces no new or beneficial results is not the subject of patent. The discovery of a law of nature or a new element in nature is not patentable. Thus no patent could be obtained for the recently discovered Argon, an element in nature, as it is of natural manufacture or origin; but it is probable that Argon will be used in compounds and processes, and thereby produce a new and beneficial result, which will render the particular combinations patentable. Anything which is injurious to public health, to good morals, or public policy, is not patentable.

It is sometimes difficult to judge as to the patentability of an invention, and should an inventor have a doubt he should submit his invention to competent patent counsel for advice.

UTILITY.

The statute requires that the invention shall be useful. The requirements of the law are fulfilled as to utility if the invention is not positively injurious to the public. Inventions which in the minds of some are frivolous are the subject of patents, such as games and toys.

HOW RIGHTS TO PATENTS MAY BE LOST.

An inventor may lose his right to acquire a patent for his invention in two ways, viz.: By neglect and abandonment.

If an inventor permits his invention to be used in public or sold for a period of two years or more prior to making application for patent, he forfeits his right to a patent. Nor is the lapse prevented by ignorance on his part of such public use or sale.

He also forfeits his right to a patent if he openly declares that he has abandoned the invention, or with silence permits the invention to be generally used. Delay alone to apply for a patent, no matter how long, will not constitute abandonment, but unreasonable delay, associated with the fact that another has produced the same invention and has patented it, will constitute abandonment.

When an invention has been previously patented in a foreign country, the U. S. patent will expire with the term of the foreign patent.

HOW PATENTS ARE OBTAINED.

To obtain a patent an application must be made therefor. This application, must contain a description of the invention in the form of a specification, and claims, covering the new feature of the invention. A drawing of the invention must also accompany the application. A model is not generally required by the Patent Office. These are filed in the Patent Office. The Government fee for filing an application for patent is \$15, this must be paid to the Commissioner of Patents at the time that the case is presented. In the Patent Office there are a number of Primary Examiners, each having charge of a certain class of inventions. It is the duty of these Examiners to see that the papers are in the proper form, and that the subject matter claimed is proper for patent, and that it is new and useful. On the filing of a case it is referred to the Examiner having charge of that class, for examination, and the Examiner makes a written report and forwards a copy of the same to the applicant or his attorney. If no reason is found against granting the patent, it is allowed and issued.

If any reason is found that indicates that the patent should not be granted the Examiner states the same in his report, and if this objection can be removed by amendment or argument the patent will be allowed and issued.

Within six months from the date of allowance of the patent the applicant must pay to the Commissioner of Patents \$20, which is the balance of the Government fee.

From the adverse decision of the Primary Examiner the applicant may appeal to the Board of Examiners-in-Chief, and from the adverse decision of the Board the applicant may appeal to the Commissioner in person, and from his adverse decision he may appeal to the Supreme Court of the District of Columbia.

INTERFERENCE.

When an application is made for a patent which in the opinion of the Examiner would interfere with any other pending application for patent for the same invention or with any existing patent, notice will be given to each party, and an opportunity is given them to prove which was the first inventor, and the patent will issue to the party proving priority.

SALE OR TRANSFER OF PATENTS.

An inventor or patentee may sell his entire interest in his invention of patent, or any undivided part of the whole or any specified part of the United States. In order to be valid this must be done by a written assignment, and said assignment if not recorded in the Patent Office within three months from its date of execution, will be void against subsequent purchasers without notice. A license under a patent need not be in writing, but it should be. A license need not be recorded.

RIGHTS AND REMEDIES UNDER PATENTS.

A patent gives its owner a right of action against an infringer of the patent, and authorizes him to contest his right to the thing patented. In action at law the owner has the privilege of a trial by jury, and his recovery will be actual damages he has sustained by the infringement. He may also sue in equity and recover damages, and in addition thereto obtain an injunction restraining further infringement of the patent. Ignorance on the part of the infringer is no excuse, although it is customary when an infringer is discovered to notify him to cease the infringement.

The owner of a patent should mark the article covered by the patent "patented," and thereby give notice to the public that the article is protected, and warn infringers. A person who places upon an unpatented article the word "patented" or any word or words importing that the same is patented, for the purpose of deceiving the public, is liable for each and every such offense to a penalty of \$100.

RE-ISSUES OF PATENTS.

After the patent is issued should it be discovered that the patent is inoperative or invalid by reason of a defective or insufficient specification, or by reason of the patentee claiming more than he had a right to claim as new, provided the error has arisen through inadvertence, accident, or mistake, and without any fraudulent or deceptive intent, the patent may be surrendered and a corrected patent will be issued in the place thereof. This substitute patent is termed a re-issue patent and it expires at the date on which the original patent would expire. Re-issues should be applied for as soon as possible after the mistake is discovered, or within two years after the grant of the original patent.

Patents are extended only by Act of Congress.

CAVEAT.

Any citizen of the United States who has made a new invention and desires to mature the same, may file in the Patent Office a Caveat, setting forth the object of the invention, and asking protection of his right until he shall have matured his invention. Such Caveat shall be filed in the secret archives of the Patent Office, and shall be operative for a term of one year from date of filing. A Caveat is a notice given to the Patent Office of the Caveator's claim as inventor, in order to prevent the grant of a patent to another person for the same invention during the life of the Caveat without notice to the Caveator.

Subsequent renewals of the Caveat may be made.

An alien may secure a Caveat if he declares his intention to become a citizen of the United States.

DESIGNS.

Patents are also granted for designs, such as a design for a manufacture, bust, statue, fabric, picture, etc. Also for new shapes. The proceeding in applications for patents for designs are substantially the same as in applications for mechanical patents.

Patents for designs are granted for the term of three and one-half years, or for seven years, or for fourteen years, as the applicant may elect.

TRADE MARKS.

A trade mark is a distinctive non-descriptive name or symbol, or both, employed to indicate the source of manufacture of any article of merchandise to which the mark is applied.

While the right to a trade mark arises under the common law, there are statu-

tory provisions in most civilized nations under which the trade marks may be registered and thereby secure to their owners certain privileges prescribed in the statutes.

In the United States a trade mark cannot be registered unless it is already in use in trade with one or more foreign countries or Indian Tribe; but this provision can be complied with by sending a few samples of the goods, with the trade mark affixed, to any merchant or dealer in Canada, or other foreign country or possession.

Anybody may get a trade mark for nothing. He has only to adopt it, and it becomes his exclusive property, so long as nobody has taken it previously for designating goods of the same sort. Furthermore, the law will defend him in this right. But, if he is a prudent man, he has the trade mark registered—that is to say, put on record in the Patent Office. He thus obtains the privilege of suing in the United States courts in case of infringement. The practice of those courts in such matters is settled, so that justice is pretty sure to be done. Otherwise he would be obliged to go to the State courts, where the outcome of legal proceedings on these grounds is doubtful.

There is another good reason for registering a trade mark. The word "registered" appears to signify that the owner is disposed to defend his property, and thus it is apt to scare off persons who might be tempted to infringe. A registration is good for thirty years and may be renewed indefinitely.

It is not every word or symbol used as a trade mark that is the subject of registration. Hence if the word is descriptive of the article, or liable to deceive the public as to the composition of the article, it cannot be registered. Or, if the symbol is a reproduction of a national or state seal it cannot be registered.

In case there should be doubt as to the registrability of a trade mark, the proprietor should submit the same to competent patent counsel for advice. This should be done before the trade mark is permanently adopted, and before great expense is gone to, to advertise the article under the mark, and before expensive labels are made.

COPYRIGHTS.

Copyrights may be secured for books, maps, charts, dramatic or musical compositions, engravings, cuts, prints, photographs, chromos, or for descriptions of paintings, drawings, statues, models or designs. The title of the subject to be copyrighted must be entered in the Library of Congress before the day of publication. In order to complete the copyright for a publication, two complete copies of the publication must be forwarded to the Librarian of Congress as soon as possible after publication.

The term of copyright is twenty-eight years.

Copyrights are assignable by an instrument in writing. Such instruments to be valid must be recorded in the office of the Librarian of Congress within sixty days from date of execution.

COSTS.

PATENT.

Government filing fee, payable when case is filed.....	\$15
Government final fee, payable within six months after case is allowed.....	20
Our fee in full.....	30

Total..... \$65

The charges as above stated are for ordinary cases. For complicated cases, or cases that require more than one sheet of drawings, an additional reasonable charge is made.

ASSIGNMENTS.

For preparing and recording in the Patent Office an assignment of patent, design, or trade mark.....	\$5
For preparing and recording an assignment of copyright.....	\$5

CAVEAT.

The total cost of a Caveat for an ordinary invention, including our fee and the Government fee, is.....	\$25
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DESIGN PATENT.

Total cost of design patent for 3½ years.....	\$30
Total cost of design patent for 7 years.....	35
Total cost of design patent for 14 years.....	50

TRADE MARK.

The total cost of trade mark registration is.....	\$50
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COPYRIGHTS.

The total cost of copyright entry is.....	\$5
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COPIES OF PATENTS, ETC.

Printed copies of the specification and drawings of United States patents will be mailed to any address in the United States or Canada for 15 cents each.

REMITTANCES.

Remittances should be sent by draft, money order, postal note, express, or check. Amounts of money should never be sent by mail.

Any business intrusted to us will be treated with the strictest confidence.

INDUSTRY AND APPLICATION.

The greatest results in life are usually attained by simple means and the exercise of ordinary qualities. The common life of every day, with its cares, necessities, and duties, affords ample opportunity for acquiring experience of the best kind; and its most beaten path provides the true workers with abundant scope for effort and room for improvement. The road to human welfare lies along the old highway of steadfast well-doing; and they who are the most persistent, and work in the true spirit, will usually be the most successful.

Fortune has often been blamed for her blindness; but fortune is not so blind as men are. Those who look into practical life will find that fortune is usually on the side of the industrious, as the winds and waves are on the side of the best navigators. In the pursuit of even the highest branches of human inquiry, the commoner qualities are found the most useful—such as common sense, attention, application, and perseverance. Genius may not be necessary, though even genius of the highest sort does not disdain the use of these ordinary qualities. The very greatest men

have been among the least believers in the power of genius, and as worldly-wise and persevering as successful men of the commoner sort. Newton's was unquestionably a mind of the very highest order, and yet, when asked by what means he had worked out his extraordinary discoveries, he modestly answered, "By thinking of them." It was in Newton's case, as in every other—only by diligent application and perseverance—that his great reputation was achieved.

We have, indeed, but to glance at the biographies of great men to find that the most distinguished inventors owe their success, in a great measure, to their industry and application. They were men who turned all things to good—even time itself. Hence, it happens that the men who have most moved the world, have not been so much men of genius, strictly so-called, as men of intent, mediocre abilities and untiring perseverance; not so often the gifted, of naturally bright and shining qualities, as those who have applied themselves diligently to their work.

Progress, however, of the best kind is comparatively slow. Great results cannot be achieved at once; and we must be satisfied to advance in life as we walk—step by step. We must sow before we can reap, and often have to wait long, content meanwhile to look patiently forward in hope; the fruit best worth waiting for often ripening the slowest.

It is marvelous what continuous application will effect in the commonest of things. The story of Bruce of Scotland learning a lesson of perseverance under adversity from the spider is well known.

The laborers for the public good especially have to work long and patiently, often uncheered by the prospect of immediate recompense or result. The seeds they sow sometimes lie hidden under the winter's snow, and before the spring comes he may have gone to his rest.

The lives of eminent inventors are eminently illustrative of the same quality of perseverance. George Stevenson had worked at the improvement of his locomotive for some fifteen years before achieving his decisive victory at Rainhill, and Watt was engaged for some thirty years upon the condensing engine before he brought it to perfection.

Accident does very little toward the production of any great result in life, though sometimes what is called "a happy hit" may be made by a bold venture. The commoner highway of steady industry and application is the only safe road to travel.

Sedulous attention and painstaking industry always mark the true inventor. The greatest men are not those who "despise the day of small things," but those who improve them the most carefully.

Although there are discoveries which are said to have been made by accident, if carefully inquired into, it will be found that there has really been very little that was accidental about them. For the most part, these so-called accidents have only been opportunities carefully improved by genius. The fall of the apple at Newton's feet has often been quoted as proof of the accidental character of some discoveries. But Newton's whole mind had already been devoted for years to the laborious and patient investigation of the subject of gravitation, and the circumstance of the apple falling before his eyes was suddenly apprehended only as genius could apprehend it, and served to flash upon him the brilliant discovery then opening to his sight.

Many before Galileo had seen a suspended weight swing before their eyes with a measured beat; but he was the first to discover the value of the fact. Fifty years of study and labor, however, elapsed before he completed the invention of his pendulum, the importance of which, in the measurement of time, can scarcely be overrated. In like manner, Galileo, having heard that one Lippershay, a Dutch spectacle maker, had presented to Count Maurice, of Nassau, an instrument by means of which distant objects appeared nearer to the beholder, addressed himself to the cause of such a phenomenon, which led to the invention of the telescope, and proved the beginning of the modern science of astronomy. Discoveries such as these could never have been made by a negligent observer or by a mere passive listener.

While Captain (afterwards Sir Samuel) Brown was occupied in studying the construction of bridges, with a view of contriving one of a cheap description to be thrown

across the Tweed, near which he lived, he was walking in his garden one dewy autumn morning, when he saw a tiny spider's net suspended across his path. The idea immediately occurred to him that a bridge of iron, ropes, or chains might be constructed in like manner, and the result was the invention of his suspension bridge. So James Watt, when consulted about the mode of carrying water by pipes under the Clyde along the unequal bed of the river, turned his attention one day to the shell of a lobster presented at the table; and from that model he invented an iron tube, which, when laid down, was found to effectually answer the purpose.

It is the close observation of little things which is the secret of success of inventors. Human knowledge is but an accumulation of small facts, made by successive generations of men, the little bits of knowledge and experience carefully treasured up by them growing, at length, into a mighty pyramid. Though many of these facts and observations seemed, in the first instance, to have but slight significance, they are all found to have their eventual uses and to fit into their proper places.

When Galvani discovered that a frog's leg twitched when placed in contact with different metals, it could scarcely have been imagined that so apparently insignificant a fact could have led to important results. Yet, therein lay the germ of the electric telegraph, which binds the intelligence of nations together, and probably, before many years have elapsed, will "put a girdle around the globe." The gigantic machinery employed in pumping our mines, working our mills and manufactorys, and driving our steamships and locomotives, in like manner depends for its supply of power upon so light an agency as little drops of water expanded by heat—familiar agency called steam, which we see issuing from the common teakettle spout, but which, when pent up within an ingeniously contrived mechanism, displays a force equal to that of millions of horses, and contains a power to rebuke the waves and set even the hurricanes at defiance.

It is said that the Marquis of Worcester's attention was first accidentally directed to the subject of steam power by the tight cover of a vessel containing hot water having been blown off before his eyes when confined a prisoner in the Tower. He published the result of his observation in his "Century of Inventions," which formed a sort of text-book for inquiries into the powers of steam for a time, until Savary, Newcomen, and others, applying it to practical purposes, brought the steam engine to the state in which Watt found it when called upon to repair a model of Newcomen's engine which belonged to the University of Glasgow. This accidental circumstance was an opportunity for Watt which he was not slow to improve, and it was the labor of his life to bring the steam engine to perfection.

Men who are resolved to find a way for themselves will always find opportunities enough; and if they do not lie ready at their hand, they will make them. It is not those who have enjoyed the advantages of colleges, museums, and public galleries that have accomplished the most for science and art; nor have the greatest mechanics and inventors been trained in mechanics' institutes. Necessity, oftener than facility, has been the mother of invention, and the most prolific school of all has been the school of difficulty. Some of the very best workmen have had the most indifferent tools to work with. But it is not tools that make the workman, but the trained skill and perseverance of the man himself. Indeed, it is proverbial that the bad workman never yet had a good tool.

Ferguson made marvelous things—such as his wooden clocks, which accurately measured the hour—by means of a common pen-knife, a tool in everybody's hand; but then everybody is not a Ferguson.

Franklin first robbed the thunder cloud of its lightening by means of a kite made with two cross sticks and a silk handkerchief. Watt made his first model of a condensing steam engine out of an old anatomist's syringe, used to inject the arteries previous to dissection.

Sir Henry Davy, when an apothecary's apprentice, performed his first experiments with instruments of the rudest description.

It is not accident, then, that helps an inventor in the world so much as purpose and persistent industry. To the feeble, the sluggish and purposeless the happiest accidents will avail nothing; they pass them by seeing no meaning in them. But it is

astonishing how much can be accomplished if we are prompt to seize and improve the opportunities for action and efforts which are constantly presenting themselves.

MODEL BUILDING.

In addition to attending to the prosecution of the applications for patents and all kinds of patent litigation and work incidental thereto we have ample facilities for building working models and machines and developing crude ideas into practical working devices.

In building models and machines we aim to produce work which is attractive in appearance and as simple and effective as the nature of the device will permit.

In many instances working models are of inestimable value in demonstrating the operation of an invention. They avoid the necessity of an endless amount of explanation, and prove conclusively that the device will accomplish all that the inventor claims it to do.

Should an inventor contemplate selling his invention he should by all means be prepared to thoroughly demonstrate to the investor the practical utility and operation of his invention, and it will be found that the amount put in good models is money well invested, for the task of disposing of the invention will thus be made much easier and much better prices can be had.

Many inventors have a natural aptitude for building and constructing, and possibly to these the foregoing suggestions present nothing new, but there are many possessing the highest inventive faculty who do not have the facilities for making good and attractive models, and it is to this latter class that we offer the advantages of the well-equipped and modern model shop at our disposal.

From rough sketches, crude models, photographs, etc., we can prepare working drawings, made to a scale; and drawings and cuts for newspaper and advertising purposes.

In other words, we are prepared to handle, transform and develop the invention from the conception of the idea into the practical operating and commercially successful machines.

Our charges for this class of work depends upon the amount of time and work consumed, but we exercise every energy to get the work out as speedily as possible, and thus reduce the cost to a minimum.

We will gladly give any further information and advice on this subject to any who inquire.

ADVICE AS TO SELLING.

The inventor naturally values his invention highly, and in so doing he is not to blame, for it is he alone who knows and values the time and attention that he has bestowed thereon in perfecting and overcoming the many difficulties that cross his path. And it is perfectly natural in him to strive to get as much as he possibly can for his invention.

Yet our experience has clearly demonstrated to us that in many instances inventors who were over anxious to make all the profit that might be connected with the invention have lost good opportunities for disposing of their inventions, and indeed it has been known to be the case where an inventor has been in absolute want, and yet he has refused a good offer for his invention simply because he thought he could get more by holding on.

It should be remembered that we have but a short time to live, and it is far better to provide for our wants and necessities while living than to deprive ourselves of them simply to amass great wealth to be squabbled over and squandered when dead.

It should also be remembered that the successful merchant believes implicitly in "quick sales and small profits."

The disposition of an invention should be considered in a practical light. A buyer is not going to put up his money for an invention unless he sees a chance of profits in it for him, and if the inventor insists on wanting all the profit of course the buyer must withdraw and possibly a fair offer is lost.

There are thousands of things to invent, and if an inventor can make a good profit on his invention why should he not do so and then turn his attention to something else? A man with a few thousand dollars can live as comfortably and have as many luxuries as a man with a million.

In offering these suggestions we do not wish to convey the idea that an inventor should sacrifice his invention, in fact, he should get for it all he can, yet in making a deal he should exercise the same judgment relative to human nature that he would exercise relative to the mechanical construction of his invention.

It is sincerely hoped that the foregoing remarks will be carefully considered and that the suggestions will serve as a guide and steer all inventors clear of a block over which many an inventor has stumbled.

REJECTED APPLICATIONS.

It frequently happens in cases where inventors have filed their own applications for patents and have attempted to prosecute their applications, that the cases are rejected or become tangled up before the examiner in the Patent Office. This is invariably due to the lack of knowledge on the part of the inventors of the rules and practices of the Patent Office. However, it should be understood that because the inventor has received a letter from the Commissioner of Patents, stating that his application for patent has been rejected, it does by no means follow that a patent cannot be obtained. In fact, there are thousands of applications yearly refused favorable action, which if handled skilfully might be gotten through. Many of these applications are for very valuable inventions and inventions upon which their respective inventors have devoted years of hard and patient study and attention. We have had remarkable success in handling rejected applications, and in one case (that of Mr. T. D. Brown, of Canandaigua, N. Y.) we secured an allowance even after the case had been rejected by the primary examiner, and his decision had been affirmed by the Board of Examiners-in-chief. In this case the examiner reversed his own decision when the case was presented in such a light as to justify him in doing so. It is not hard to see that any reasonable examiner, desiring to do what is right, will readily reverse his own decision when it is clearly shown to him that in doing so he is doing what is right, and that the ends of justice require it.

We therefore invite correspondence from those who have rejected cases pending before the Patent Office. Our fee for prosecuting such cases is in proportion to the amount of work that is required to put the case in proper condition. But in these, as in all other cases, we will endeavor to regulate our charges so that they will not be exorbitant.

THE INVENTIONS MOST PROFITABLE.

Patents for improvements on small objects in common use, or in the manufacture thereof, are usually much more profitable than those for large and costly structures.

In an official report of a Chief Examiner in the United States Patent Office appears the following:

"A patent if it is worth anything, when properly managed, is worth and can be easily sold for fifty thousand dollars. These remarks only apply to patents of ordinary value. They do not include such as the telephone, the pianing machine, and the rubber patents, which are worth millions of dollars each. A few cases of this kind will better illustrate my meaning.

"A man obtained a patent for a slight improvement in straw cutters, took a model of his invention through the Western States, and after a tour of eight months returned with \$40,000 in cash or its equivalent.

"Another inventor obtained extension of a patent for a machine to thresh and clean grain, and sold it in about fifteen months for \$60,000.

"These are ordinary cases of minor inventions, involving no very considerable inventive genius and of which hundreds go out of the Patent Office every year. Experience shows that the most profitable patents are those which contain very little invention and are to the superficial observer, of very little value."

PATENTS THE FOUNDATION OF ENTERPRISE.

In the practical application of new and useful improvements, America leads the world. According to an estimate made by Commissioner of Patents, from six to seven-eights of the entire manufacturing capitals of the United States, or upward of sixty thousand millions of dollars, probably is based upon patents, either directly or indirectly. A very large proportion of all patents prove remunerative, which is the reason why so many are applied for, and so many millions of capital invested in their working. "But all patents," says an able writer, "are not productive; neither are all farms; all men are not rich; all mines are not bonanzas.

"There is scarcely an article of human convenience or necessity in the market to-day, that has not at some time or other been the subject of a patent, either in whole or in part. The sale of every such article yields the inventor a profit. If we purchase a box of paper collars, a portion of the price goes to the inventor; if we buy a sewing machine, the chances are that we pay a royalty to as many as a dozen or fifteen inventors at once. Indeed, the field is so vast and the number of profitable patents so great, that it would be far preferable to undertake a recapitulation of those patents which are not profitable than those which are."

FOREIGN PATENTS.

Many inventions patented in this country are of such a nature and are adapted especially to requirements found only in this country, as to render them practically useless in foreign countries. Of course, for such inventions it is money thrown away to secure foreign patents. Again many inventions are patented here that would also be most valuable in foreign countries, if protected by patents. Therefore, before applying for foreign patents and before losing his right to make such application, an inventor should consider most carefully the advisability of making application in foreign countries for patents to protect his invention.

To those who need any assistance in this line we will gladly tender any service in our power. We are represented in every capital city in the world, and by corresponding with our agents we can soon find out the probable value of an invention in any foreign country.

We also have the facilities for attending to foreign patent work with accuracy and dispatch and will be pleased to open correspondence with any who are interested in this subject.

American inventions find a ready sale in foreign countries, and this is so whether the inventions are protected by foreign patents or not; but in the latter case the profits derived from the sales go into pockets other than those of the original inventor.

SALE.

That at the present day it is difficult to sell patents and that there is a strong prejudice against them, would be useless to deny. No matter how important or valuable the invention may be, there is a disposition on the part of the public to be very careful how they invest. It is true that the "hard times" in a great measure, operate against sales; still, that is not the main cause and greatest obstacle in the way of making sales. The greatest difficulty lies within the inventors themselves.

No sooner does an inventor get his patent allowed than his ideas change, and with few sensible exceptions, he asks from \$25,000 to \$100,000 for his invention, on which a month before he hesitated to risk a few dollars to secure a patent.

Patents are still valuable and find buyers when the improvement is good and the inventor put his prices at reasonable figures, but at fancy prices a sale cannot be made. Until the patent is sold it has only imaginary value. It is only when the inventor disposes and realizes that he knows what the invention is worth to him in dollars and cents, and no invention is worth more than it will produce. Of course, when we say produce, we take it for granted that the patent is in the right hands and has been given proper publicity and the attention it deserves.

To induce capitalists to buy, it is necessary to show them margin enough to make a good profit on manufacturing the article, whatever it may be, and also sufficient to enable him to make the money paid for the patent, outside of the profits on manufacturing. Without the capitalists can see this, of course he cannot be expected to buy, as there would be no inducement.

That an invention in a financial sense is worth no more than it will bring in dollars and cents, no matter what the intrinsic merit of the invention may be, is a proposition that no one will deny.

THE GOVERNMENT AND THE INVENTOR.

In respect to the relations between the Government and the inventor, the popular misconception is very great; and this it is the primary object of these lines to correct and diminish, in order to free the Patent Office from the awkward alternative of either issuing patents of dubious validity or else refusing to issue patents at all.

In estimating the causes which contribute to this popular misconception, the composite character of our Patent laws must not be lost sight of. The patent practice is one of the few subjects in which there is much admixture of law. It is brought forth by written law yet it is governed both by written and unwritten law. Hence it is not unusual to find inventors of learning who are annoyed and inconvenienced by ignorance of some fundamental maxim of Patent Law. The current idea of Patent Rights by no means consides with the laws' conception of a limited monopoly. In the haze of popular interpretation the applicant gathers the notion that the patent is a formal and assured (sequel) to the invention—that the fee fixed by law is the sole equivalent demanded from him for the protection accorded to his discovery, and that having (either by application or accident) acquired a mechanical or chemical novelty, he has nothing to do but to insist on the government issuing directions by which the profitable use and exercise of his discovery are reserved to him and his assigns for nearly a generation. In short, the popular notion teaches him that the lucky inventor is to receive everything and to give nothing to the public in return. Very justly the law treats these ideas as the illustrations of ignorance; for in the first place, the discovery of some mechanical truth by no means authenticates the discoverer as the "true and first inventor" of the apparatus embodying its practical development. What is novel to him may be familiar to many others in the same range of science; for without fully endorsing Chaucer's theory that "there is nothing new but what has once been old" it must yet be admitted that to every novelty the inquiries and experiments of many minds simultaneously tend, under the pressure of that necessity which is the acknowledged parent of Invention. Hence it frequently happens that the substance of a supposed discovery has already been anticipated, published and protected; and that several independent inventors are one and all foisted by "the true and first inventor," to whom alone the law recognizes the donation of a patent. Indeed the "simultaneousness of invention" has practically passed into a proverb and to this day the honor of inventing the steamboat is claimed with uniform persistence on behalf of an American, an Englishman, a Scotchman, a Frenchman and a Spaniard.

Equally erroneous is the conception that the fee fixed by law is the price of the patent. True it is that a fee is charged to meet the expenditures incurred in the examination of the application and the issue of the patent; but the real price demanded from the applicant is summarised in the following obligations: (1) that he is the inventor of a useful secret, prior to his creation unknown and unanticipated. (2) that he must in the document specifying the details of the discovery, so effectually disclose the secret that the public will know exactly what it is they are forbidden to imitate, and will, at the end of the term of the monopoly, be enabled, by aid of this information, to work the invention as efficiently as the inventor; (3) that he must claim no protection for no part which is not both useful and novel; and (4) that he fully recognizes that his patent is liable to voidness if any of his allegations are either intentionally untrue, or intentionally erroneous. It therefore follows that the inventor has much to consider in formulating his claim to Patent Rights. What he should do, and what he should avoid doing in order to secure a strong yet valid patent, are subjects that require the consideration of minds of experience, for the fact must not be discounted that a dubious patent is worse than none at all, and a bad one is a burden of affliction and a millstone of misery.

In anticipation of the criticism that there should be no technical obstructions to the issue of a patent, it may be answered that the public have a right to consideration as well as the inventor and in their interest the utmost precision and perspicuousness are demanded. The public incur heavy pecuniary penalties if they even unintentionally infringe a patented invention; and so it is essential that they should be furnished with explicit details of the process they are forbidden to copy.

Equally imperative is it that the seal of the Patent Office should not be wantonly or loosely affixed to a document directed against acquired right of a citizen, forbidding him to do what under other circumstances the professed freedom of our institutions and laws license him to do.

It is the duty of conscientious Patent Attorney, promoted by his experience and knowledge, to guide the inventor's action in such manner as to avoid the pitfalls and obstacles which of necessity beset his path, and by the aid of his information protect the inventor from piracy of the fruits of his calculation and industry.

OPPORTUNITIES.

Improving opportunities is well, but making opportunities is better. Many a man says that he could do something if he only had an opportunity, but, the man who is determined to do something will secure the opportunity, even if he has to make it. Bacon says: "A wise man will make more opportunities than he finds."

Any man, woman or child who has produced an invention of any description has made for himself an opportunity to secure a patent therefor, and by improving such an opportunity it cannot be estimated in advance the value that will be derived therefrom. History is replete with instances where poor men have been made fabulously rich through patents that they have secured on apparently trivial improvements and inventions. Had these men neglected their opportunities, their inventions would never have benefited them in any respect. Thus it is often heard that the first inventors do not derive any benefit from their inventions. This is simply owing to the fact that they have not improved their opportunities by securing proper protection for their inventions under the liberal patent laws of this country, and they have permitted others to discover or use their secrets until the invention becomes common property. Popular sentiment is often in sympathy with those inventors who have thus lost their rights, but in fact they deserve no sympathy, as they are alone at fault and are themselves to blame.

Never yet has an invention ever been of value to its inventor unless that invention was properly protected by a patent. Many a man who might have secured riches and fame has passed away in poverty, simply because he neglected to patent those inventions that occurred to him in his daily occupation.

The Patent Office stands ready to grant a seventeen year monopoly to an enterprising inventor, and the man who conceives an invention and fails to protect it until someone else anticipates him, abuses his opportunities and justly deserves the consequences.

The all-governing power has seen fit to imbue some men with the faculty of invention—The highest attribute of man. This is undoubtedly done for a purpose, and the man who has thus been favored and permits the products of this faculty to pass into oblivion with himself, violates a sacred trust in him reposed.

The faculty of invention is given to some, in order that they may disclose the invention in practical form and thus benefit all.

Thus it is that a person who has produced an invention, and who refuses to disclose and patent it, not only violates his trust, and is undeserving of sympathy should his invention be afterwards discovered and patented by another, but he refuses to accept an opportunity; and he cannot justly complain of never having had one.

HOW TO OBTAIN A PATENT.

The first step towards securing a patent is for the inventor to send us a sketch, drawing, photograph or model of his device together with a full description of the invention, such as he is able to give. Neither model or photograph is necessary, a clear description in the inventor's own language and a sketch such as he can make is quite sufficient. If the invention is complicated he should refer to the various parts by letters or numerals.

On receipt of this information we will at once make an examination of the records of the Patent Office to ascertain if a patent can probably be secured, report to him the result of our search and forward such references that may be found that would anticipate the invention. We make no charge for examining the records of the Patent Office and reporting on the patentability of an invention. If we report that the invention is patentable, we call on the inventor for \$15, and upon receipt of this amount we immediately begin work upon the preparation of the papers in the application for patent. This includes the specification and drawing. After the papers are prepared we forward them to the inventor for his signature and approval. When the papers have been approved and executed they are returned to us together with \$30. Of this amount \$15 is for the Government filing fee and \$15 the balance of our fee. Within six months after the application is allowed, the inventor must pay the final Government fee of \$20. The total cost of a patent for an ordinary case, including all fees, Government, drawing and attorney, is \$65. The amount, however, being paid in installments, as indicated, places the expenses within the reach of many who could not pay the whole sum in a lump.

It is of extreme importance that inventors should file their applications for patent without delay. The law favors the diligent and those who are active in making known their claims and asserting them. The first inventor is the first who conceives the invention, puts it into practical form and promptly declares his claim to it; and it should be borne in mind that no money can be made out of an invention unless it is protected by a patent. Capitalists will not embark in an enterprise and buy machinery for the manufacture of an article unless they are assured protection and it is simply owing to the fact that inventions can be protected by patents that they find a market among manufacturers.

When an inventor wants time to improve his invention or to prepare the papers, models and drawings necessary to obtain a patent, he will prevent patent being granted to any one else surreptitiously or to a subsequent inventor, by filing a caveat in the secret archives of the Patent Office. In order to file a caveat, the inventor need only send us a rough sketch of the invention with a description in his own words and the fee \$25 in full. Upon receipt of this amount, we will prepare all the necessary papers and get them on file in the Patent Office at the earliest possible moment.

Two or more independent inventions cannot be claimed in one application, but where several distinct inventions are dependent upon each other and mutually contribute to produce a single result, they may be claimed in one application.

Joint inventors are entitled to a joint patent, neither can claim one separately. Independent inventors of distinct and independent improvements in the same machine cannot obtain a joint patent for their separate inventions, nor does the fact that one furnishes the capital and the other makes the invention entitle them to make application as joint inventors; but, in such cases, they may become joint patentees by the assignment of an undivided part interest.

WE HAVE GAINED ESTEEM AND CONFIDENCE.

JACKSON, TENN., October 26, 1896.

MESSRS. GLASCOCK & CO.,
Washington, D. C.

Gentlemen:—

Your efficient and prompt work in procuring my claim in the Patent Office has gained for you my esteem and confidence. I am thoroughly convinced of your entire reliability, and above all in the prosecution of patent claims you have proved yourself worthy of the trust of the distinguished gentleman, Hon. B. A. Enloe, M. C., who recommended you to me. I can cheerfully recommend your firm to all my friends and the public generally.

Very respectfully,
J. M. COCHRAN.

NOTHING SUCCEEDS LIKE SUCCESS.

SPARTA, GA., February 15, 1896.

MESSRS. GLASCOCK & CO.,
Washington, D. C.

Gentlemen:—

My patent papers have been received and in every respect acceptable. I am greatly elated at your success, the appreciation in which you can share with me, when I state that the identical case, without any alteration in any respect whatever, has recently passed through hands. I paid them the usual fee of \$5.00 to make the usual examination, the result of the search being "without any doubt, no patent obtainable."

The most I can say in your behalf is that in the future you can depend on getting my business with the Patent Office.

I have done what I could with an acquaintance of mine, to induce him to give you his business, he is now preparing to make application for patent on an improved cotton press. He promised me positively that he would open correspondence with you.

Again I tender my unqualified thanks for the promptness and efficiency of your work. I am

Yours truly,
WM. A. GRIMES.

WITHOUT EXTRA CHARGE.

WILLIAMSPORT, PA., November 11, 1896.

MESSRS. GLASCOCK & CO.,
Washington, D. C.

Gentlemen:—

I herewith acknowledge the receipt of patent on valve stopper, and return my thanks for your prompt and satisfactory attention. Also for answering the many inquiries without extra charge.

Yours truly,
CLINTON E. LONG.

CANANDAIGUA, N. Y., October 9, 1897.

MESSRS. GLASCOCK & Co.,

Patent Attorneys,

Washington, D. C.

Gentlemen:—

During my long experience as a manufacturer of tinware, I have many times had occasion to engage the services of patent attorneys. Before I became acquainted with yourself, I made several applications for patents through various attorneys, and I must admit that the work done by these attorneys was not altogether satisfactory to me. When I first heard of you I had pending before the Patent Office an application for patent which had finally been rejected by the Examiner and following the advice of my attorney then representing me, I carried the case up on appeal to the Board of Examiners-in-Chief. The Board affirmed the Examiner's decision, thus leaving me out. I then applied to you and through your skillful efforts succeeded in getting the examiner to reverse his own decision and grant me the patent.

This patent I am gratified to state has just been passed upon by the Courts and pronounced valid and infringed. If I had applied to you in the beginning in this case, I would have saved considerable money, time and uneasiness.

Since handling the case above referred to, you have presented a number of applications for patents for me, and you have never yet met with defeat. You have secured a patent on every application that I have filed through you, and I know this could not have been done unless you were more skillful than the ordinary attorney. Furthermore, I am convinced that your patents are the best that can be secured.

I invariably give your name and address to all parties asking about patent attorneys, as I know that you can accomplish anything in your line that is possible of being accomplished at all.

Yours very truly,

TRISTRAM D. BROWN.

The Brown Oil Can Company.

Manufacturers of

Brown's Improved Self-Sealing Oil Cans,

Toledo, Ohio.

MESSRS. GLASCOCK & Co.,

Washington, D. C.

Gentlemen:—

Please accept our thanks for the promptness in forwarding our last Letters Patent on Wash Boards. We are well pleased with the way you have treated us and will cheerfully recommend you to any person desiring the services of a patent lawyer, as we have always found you to be men of promptness.

Very truly yours,

L. O. BROWN, Pres.